

**INQUIRY INTO THE IMPLEMENTATION OF THE  
RECOMMENDATIONS CONTAINED IN THE NSW CHIEF  
SCIENTIST'S INDEPENDENT REVIEW OF COAL SEAM  
GAS ACTIVITIES IN NEW SOUTH WALES**

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### Submission into the Chief Scientists Report

I wish to address the Terms of Reference in regard to other major reports relating to Unconventional Gas industry that are relevant, and show that the industry is not wanted or needed for Australia . A complete and permanent ban should be in place.

1. In April 2019, the **Permanent Peoples Tribunal Advisory Opinion( PPT)** (from its May 2018 sitting)- has recommended that all Unconventional Gas Exploration be banned. The PPT took evidence from Australian cases across QLD, NT, NSW, as well cases from USA, Europe, UK,- with presentations from Doctors for the Environment Australia( DEA), National Toxics Network, Environmental Defenders Office( EDO) and Australian Earth Law Alliance. The PPT stated that any laws regulating the industry have been largely symbolic in substance and procedure, despite any initial instrumental intention and has been unenforceable. Unconventional Gas extraction is a major contributor to climate change. **The PPT condemns those countries that have revoked bans on CSG, due to the overwhelming evidence of catastrophic impacts on the environment, social and cultural.** CSG is not a bridge fuel and is incompatible with minimising climate change.

As the evidence on the Unconventional Oil and Gas Extraction industries( UOGE) has clearly demonstrated, despite apparent legal restraints the mega Corporations and others continue to wreak havoc on human rights and those of nature. The time for relying on the State and its juridical apparatus for comprehensive solutions is gone. That goes also for the international community and international law.

The evidence provided was clear that the (UOGE)industry has violated many provisions of the substantive and procedural international human rights law contained in the instruments indicated in chapter 4.UOGE techniques breach, by its very nature, substantive human rights protected by international law, especially the right to health, by attacking all the components of natural ecosystems that can reach their destruction and therefore result in an ecocide; and threaten the enjoyment of all human rights of the present and future generations through its direct contribution to climate change.

The industry also often violates procedural human rights protected by international law, especially the rights of access to information and participation in decision-making; and also, frequently, they violate the environmental impact assessment obligations, and rights of human rights defenders.

It was made clear in case studies presented to the PPT that there exists an “axis of betrayal” between corporations and governments that allows the violations described to the PPT. Betrayal by governments comes in many forms, including the failure to pass effective and comprehensive legislation. Governments also fail to provide for effective implementation and enforcement of such legislation. The evidence presented showed corporate “state capture”.

The mega corporations, more wealthy than many nation states and seen almost universally in cargo cult fashion as essential “growth machines” providing “development”, have gained a dominant position viz a viz nation states as well as governments of sub-state jurisdictions. In effect, they have established a new form of sovereignty or quasi-sovereignty. They do not derive sovereignty from the people nor do they exercise their power on behalf of the people. Rather they operate, according to law, in the interests of the corporation and its major shareholders. Too often this means they are in

conflict with the interests of the citizenry and nature, even of the governments who are beholden to them.

The serious rights violations suffered by people and nature are accompanied by little if any economic benefit to those communities while the profits go to the corporations and other “benefits” to the complicit State officials. The industry is being driven not by necessity but the desire for profits by mega-corporations with the complicity of governments and others who believe it will bring benefits to them, and “tough luck” if there is “collateral damage”. That expression is normally used to refer to military actions in armed conflict. Today there is a “silent war” by the industry, with its political, financial and media allies, against the ecosystem. The assault is directed at Mother Earth while people are the indirect “collateral damage”.

From many jurisdictions around the globe, the evidence is overwhelming: first, UOGE is a major contributor to the crisis the world is facing at the “climate crossroads”; second, the dangers of UOGE to the rights of people, communities and nature are inherent in the industry, and that such dangers all too often result in serious, even catastrophic violations of those rights. Where UOGE operations impact, local ecosystems are destroyed and that of the planet comes under threat.

The PPT believes that the direct, active resistance of the people in countries around the globe must be recognized as justifiable resistance to the unjust, even murderous, destruction of communities and plundering of nature’s resources aided and abetted by governments. As has been said, “When injustice becomes law, resistance becomes duty”. The PPT supports the resistance movement that has been growing for many years and recognizes the importance of both the legal struggle and the non-legal struggles of groups around the world. What is required is the full implementation of the people’s democratic rights, including the right to resist tyranny and oppression and the internationally recognized right to self-determination of issues affecting them.<sup>1</sup>

**2.** Data collected by **Ndevr Environmental** ( an emissions – tracking organisation), indicated Australia’s LNG fugitive emissions are rising, reinforcing that gas is not a clean alternative for energy generation. Fugitive emissions for Q3/FY2019 are the highest on record and have increased rapidly for four consecutive quarters. The latest release of the quarterly NGGI report highlights that increased annual emissions in the stationary and fugitive emission sectors are primarily driven by the 22% increase in LNG exports between 2017 and 2018<sup>2</sup>

**3.** July, 2019- Ian Dunlop, (Former Head of the Australian Coal Association and CEO of the Australian Institute of Company Directors & Chair of the Australian Greenhouse Office Experts Group on Emissions Trading 1998-2000), co-authored a **Breakthrough Discussion Paper- *The Third Degree: Evidence and Implications for Australia of Existential Climate-Related Security Risk***. This paper detailed that “climate change is the single biggest threat the world faces” and that it must be addressed in both a political and corporate sense. It described how accelerating climate change, impacts negative consequences of large population centres, with economic upheaval, mass migration, even wars -depleting resources. That complacent attitude by Governments and companies to climate change represented nothing less than “criminal negligence” by our political

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<sup>1</sup> <https://www.peopletribunalongas.org>

<sup>2</sup> <https://ndevrenvironmental.com.au/tracking-2-degrees-fy2019-q3/>

and corporate incumbency. Leader and institutions such as the International Energy Agency, the World Economic Forum, the World Bank, the International Monetary Fund, Academies of Science and the United Nations—along with government in the UK, Ireland, Canada, France and Catalonia, are calling for emergency action if catastrophic climate outcomes are to be avoided. Large conventional economical projects may become uninsurable due to climate risk.

“Likewise, company boards have a fiduciary responsibility to ensure the viability of their organisations, and manage the threats they face, in the interests of shareholders, customers and community. Climate change is now the greatest threat to that viability, far greater than the 2008 Global Financial Crisis, as regulators around the world are now emphasising<sup>3</sup>

**4. There is a growing body of literature documenting the adverse health consequences of CSG development.** An assessment of all the peer –reviewed science reports on the health impacts of Unconventional Natural Gas Development( UNGD) in USA showed an extremely significant growth in number of reports completed more recently. “Of the 685 papers reviewed it established that 84% of public health studies contain findings that indicate public health hazards, elevated risks, or adverse health outcomes; 69% of water quality studies contain findings that indicate potential, positive association or actual water contamination; and 87% of air quality studies contain findings that indicate elevated air pollutant emission and/or atmospheric concentrations. This paper demonstrates that the weight of the findings in the scientific literature indicates hazards and elevated risks to human health as well as possible adverse health outcomes associated with UNGD <sup>4</sup>

Overseas and Queensland evidence shows significant health impacts from coal seam gas. In Symptomatology of a Gas Field, Geralyn McCarron concluded “58% of residents showing adverse health effects..... in a pattern reported outside the scope of expectation in small community <sup>5</sup>

Known air pollutant toxins( that are acknowledged by the gas industry) according to the National Pollutant Inventory include Oxides of Nitrogen( irritant- triggers asthma);Particulate Matter( causes cardiovascular illness and death, respiratory disease); Carbon Monoxide( increase in cardiovascular disease); Volatile Organic Compounds(irritants and known carcinogens);Sulphur Dioxide(heart and lung irritants); Formaldehyde(irritant and known carcinogen) and Ozone( respiratory irritant). The CSG emissions in QLD’s Darling Downs area have increased substantially from anywhere 300% to greater than 6000%. CSG and it’s associated infrastructure is a significant public health concern <sup>6</sup>

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<sup>3</sup> [https://docs.wixstatic.com/ugd/148cb0\\_c65caa20ecb342568a99a6b179995027.pdf](https://docs.wixstatic.com/ugd/148cb0_c65caa20ecb342568a99a6b179995027.pdf)

The Third Degree: Evidence and Implications for Australia of existential climate related security risk- July 2019

<sup>4</sup> Hays and Shinkoff, Towards an Understanding of the Environmental and Public Health Impacts of Unconventional Natural Gas Development: A Categorical Assessment of Peer Reviewed Scientific Literature 2009-2015 <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0154164>

<sup>5</sup> <http://www.ntn.org.au/wp/wp-content/uploads/2013/05/Symptomatology-of-a-gas-field-An-independent-health-survey-in-the-Tara-rural-residential-estates-and-environ-April-2013.pdf>

Symptomatology of a Gas Field 2013 Geralyn McCarron p2

<sup>6</sup> G. McCarron-Air Pollution and human health hazards: a compilation of air toxins acknowledged by the gas industry in Queensland’s Darling Downs  
<https://www.tandfonline.com/doi/full/10.1080/00207233.2017.1413221>

Unconventional Natural Gas Developments affects “human health and well-being not only through direct exposures to toxic chemicals in air, water and soil, but also through many stressors introduced into communities. These include excessive noise and light pollution, increases in traffic accidents and fatalities, increases in domestic violence, alcohol and drug use, crime and disruptions of family and community relationships”<sup>7</sup>

The CSG industry already acknowledges the impact “Project emissions adversely impact air quality regulating services, leading to exposure of the community to contaminants.” and has an established health impact assessment methodology which has never been implemented in Australia in this Industry<sup>8</sup>

Farmers are exposed to a unique range of vocational stressors, and suicide rates in the farming community are higher. CSG added two unique dimensions to the Edinburgh Farming Stress Inventory (EFSI): Off-Farm CSG Concerns (concerns about possible impacts of CSG extraction on human health, communities, and the environment) and On-Farm CSG Concerns (potential CSG impacts on farm profitability, disruption of farm operations, and privacy). CSG stressors contributed to a unique stress profile. CSG concerns contributed to depression and stress reactivity.<sup>9</sup>

5. Allowing for pipeline transmission charges- the delivered cost of gas to Sydney would be in the price range of \$9 to \$9.40 from the NGP. It is highly unlikely the development of the Narrabri Gas Project will do anything to ease electricity prices in the National Electricity Market, either in the immediate future or in the long term, as it is unlikely to ever represent the marginal source of supply for gas in the Eastern Gas Region. At best, annual production at Narrabri might be 70PJ per annum, which is 3.7% of east coast gas production – certainly not enough to have any effect on price. In fact the **Pegasus Economics Report** states that the current “gas crisis” is in fact created by Santos and developing the Narrabri Gas Project certainly won’t fix it. Santos decided to build two gas processing trains at its Gladstone export terminal when it only had enough gas to fully support one. To meet this shortfall, Santos has diverted substantial volumes of gas from domestic users to satisfy their export contracts. Santos wrongly claimed in its EIS that its Queensland export terminal would not impact Australia’s domestic gas supply or price, when it has in fact driven the gas crisis.<sup>10</sup>

Domestic priced gas is so high that demand in Australia is falling. Gas dependant industry is closing, domestic consumers are switching fuel sources, and gas is being used less for electricity production.

Gas usage for power generation is at its lowest level in a decade, at just 7.9% of the National Energy Market(NEM)in 2018( AEMO) .While wind and solar have increased from less than 0.5% to 11.9% over the last decade, gas usage has fallen<sup>11</sup>

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<sup>7</sup> <http://www.marcellushealth.org/final-report.html>

<sup>8</sup> IPIECA-International Association of Oil and Gas Producers. 2016. Health impact assessment: a guide for the oil and gas industry. IOGP Report 548

<sup>9</sup> Fracked: Coal seam gas extraction and farmers’ mental health( 2016) Methuen I Morgan, Donald W. Hine, Navjot Bhullar,Debra A. Dunstan, Warren Bartik  
<https://doi.org/10.1016/j.jenvp.2016.04.012>

<sup>10</sup> Report on the Narrabri Gas Project- August 2019- Pegasus Economics- Davey & Fisher  
[https://d3n8a8pro7vhmx.cloudfront.net/lockthegate/pages/6326/attachments/original/1571263720/NGP\\_Economic\\_Report\\_online\\_version.pdf?1571263720](https://d3n8a8pro7vhmx.cloudfront.net/lockthegate/pages/6326/attachments/original/1571263720/NGP_Economic_Report_online_version.pdf?1571263720)

<sup>11</sup> [www.ieefa.org](http://www.ieefa.org) Towards a Domestic Gas Reservation in Australia, Bruce Robertson, July 2019

6. The Institute for Sustainable Futures undertook modelling, in 2018, of the **renewable energy potential of Narrabri Shire**, producing two scenarios for renewable energy development in the region; an Advanced Renewables Export Scenario (RE-ADV-X) and a Renewables Export Scenario (RE-X). *Renewable Narrabri*, mapped solar and wind resources, industry price and employment data were used to estimate the investment and employment potential of the two scenarios, and the area of land needed to provide those jobs. In both Renewable Energy Export scenarios, the Narrabri Shire plays an important part in New South Wales' energy transformation – producing significantly more electricity than is required locally, resulting in more and longer lasting jobs for the Shire than the Narrabri gas field would generate, and affecting a much smaller area of land. The scenarios outlined in this report are aligned with the NSW Renewable Energy Action Plan<sup>12</sup>

In October 2018- a door to door survey of more than 800 homes showed overwhelming positivity in Narrabri towards renewable energy with 97% of people surveyed supporting renewable energy as a way to provide long-term jobs for Narrabri, compared to CSG<sup>13</sup>

There is wide-scale community rejection of the CSG industry in NW NSW, and the NGP in particular. Nearly 23,000 submissions were received responding to Santos' Environmental Impact Statement (EIS), breaking all previous records for development projects in Australia and making it the most controversial project in Australia. Only 300 (1.3 per cent) supported the project, with 98.7 per cent opposed. Even in the local area (Narrabri, Wee Waa and Boggabri postcodes), 319 opposed the project, versus 180 supportive.

Thirty- five councils in NSW oppose the development of CSG in their region and another fourteen councils have declared their concern about CSG.

In her 2014 report , even the Chief Scientist acknowledges: "There are no guarantees." "...it is inevitable that the CSG industry will have some unintended consequences, including as the result of accidents, human error, and natural disasters.."

After five years the failure to implement the recommendations of the Chief Scientists report raises serious questions about the will of Government and the regulators to even try to regulate it.

If the time, energy, resources and finances of the UOGE and the Narrabri Project was instead used to develop renewables-Australia would be world leaders in renewables.

It is time for a complete and permanent ban of the Unconventional Gas and Oil Industry.

Thankyou for accepting my submission.

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<https://www.uts.edu.au/sites/default/files/article/downloads/Teske%20et%20al.%202018%2C%20Renewable%20Narrabri.pdf>

<sup>13</sup> [https://www.lockthegate.org.au/narrabri\\_wants\\_renewable\\_energy](https://www.lockthegate.org.au/narrabri_wants_renewable_energy)